

MICROENCAPSULATED AND MACROENCAPSULATED DRAG REDUCING AGENTS

Abstract of the Disclosure

- 5 High concentration drag reducing agents may be prepared by microencap-
sulating and/or macroencapsulating polymer drag reducing agent. The encapsula-
tion may be performed prior to, during, or after the polymerization of monomer into
effective drag reducing polymer. If encapsulation is done before or during polymeri-
zation, a catalyst may be present, but little or no solvent is required. The result is
10 very small scale bulk polymerization within the capsule. The inert capsule or shell
may be removed before, during or after introduction of the encapsulated drag
reducer into a flowing liquid. No injection probes or other special equipment is ex-
pected to be required to introduce the drag reducing slurry into the liquid stream,
nor is grinding (cryogenic or otherwise) of the polymer necessary to form a suitable
15 drag reducing agent.